**MARTINS, VALERIE NKECHI**

23, Banire Street, off Cole Street, Ojuelegba, Surulere, Lagos State, Nigeria

+234(0)8037913617 | [val4martins@gmail.com](mailto:val4martins@gmail.com) |

[www.linkedin.com/in/valerie-martins-7018a8b3/](http://www.linkedin.com/in/valerie-martins-7018a8b3/)|

**SUMMARY**

Research Assistant with a strong background in Cell and Molecular biology, skilled in molecular biology techniques, scientific writing, protocol optimization, student mentoring, data analysis and interpretation, enabling me to contribute effectively to collaborative, high-impact research. Interested in functional genomics and investigating cellular reprogramming in plants in response to flooding, an environmental stressor that threatens global food security by reducing crop yields and impairing plant growth. I am committed to advancing research aimed at developing flood-resilient crops.

**EDUCATION**

**University of Lagos, Akoka Yaba, Lagos State, Nigeria December 2021 – July 2024**

M.Sc., Cell Biology and Genetics (Cell and Molecular Biology), *Distinction* CGPA: **4.57/5.0**

* Thesis: Isolation, Characterization and Molecular Identification Of Plastic Bio-Degrading Micro-Organisms Isolated From River Ethiope

**University of Ilorin, Ilorin, Kwara State, Nigeria October 2012 – September 2016**

B.Sc., Anatomy, *Second Class (Hons) Lower Division* CGPA: **2.68/5.0**

* Thesis: Characterizing Sex Using Anthropometric Variables of the Human Hip Bone in Skeletal Remains from Museum Collections in Ilorin, Kwara State, Nigeria.

**RESEARCH EXPERIENCE**

**POSTGRADUATE RESEARCH July 2023 - February 2024**

**D.K Olukoya Central Research and Reference Laboratory, University of Lagos, Lagos State**

Supervisor: Dr. O.A. Adebesin

* Cultured and Isolated bacteria from river water and sediment samples for environmental and microbial studies.
* Conducted Biochemical tests and morphological characterization on isolates.
* Conducted DNA extraction on isolates to support molecular analysis.
* Conducted plastic degradation tests using bacterial isolates, demonstrating their potential as plastic bio-degraders.
* Performed Random amplified polymorphic DNA-Polymerase Chain Reaction (RAPD-PCR) for evolutionary studies of bacterial species.
* Performed Polymerase Chain Reaction (PCR) for molecular characterization.
* Sequencing bacterial isolates for identification of species that possess bio-degradation capabilities.
* Involved in the research manuscript writing.

**UNDERGRADUATE RESEARCH January 2016 - April 2016**

**Anatomy Museum and Laboratory, University of Ilorin, Ilorin, Kwara State**

Supervisor: Dr. R. Jaji-Sulaimon

* Examined and confirmed the integrity of pelvic bones used in the study, ensuring undamaged specimens for accurate analysis.
* Measured key anthropometric parameters to assess the accuracy and reliability of sex determination methods.
* Investigated potential variations in pelvic bone morphology between male and female individuals to enhance forensic and anthropological applications.
* Explored practical applications of pelvic bone sex determination in forensic anthropology, archaeological studies, and medical diagnostics.

**RELEVANT EXPERIENCE**

**MEDICAL RESEARCH ASSISTANT September 2024 – Present**

**Dukes Neurosurgery and Specialist Hospital, Ikeja, Lagos State**

* Gather, analyze and interpret data to identify opportunities to improve clinical research in the hospital.
* Observe tests, analyze data from the EMR, Laboratories, Clinical reports, hardcopies or other materials as may be provided and interpret data.
* Prepare technical reports, summaries, protocols such as questionnaire and quantitative analyses.
* Develop new methods, models and technologies for the research.
* Participate in scientific conferences and contribute to scientific journals.
* Participate in the development of protocols and case report forms.
* Responsible for organizing clinical meetings as instructed by the medical director.
* Present research findings in meetings, conference and professional societies.
* Assist in developing researched backed graphical contents for publications and presentations.
* Use established procedures to perform data analytic related tasks.
* Perform literature reviews and create bibliographies for reports and paper.
* Write Academic papers for publications and presentations at conferences.

**GRADUATE RESEARCH ASSISTANT January 2023 – August 2024**

**Dr. Adebesin, Department of Cell Biology and Genetics, University of Lagos, Lagos State**

* Assist undergraduate and postgraduate students by providing guidance and technical support to students in conducting experiments, analyzing data and preparing their research projects, making edits and corrections to their project write ups alongside ensuring the successful completion of their academic requirements.
* Performed SDS-PAGE and Agarose gel electrophoresis for the separation and analysis of nucleic acids and proteins.
* Conducted Plasmid DNA, genomic DNA, RNA, and Protein extractions from various biological samples.
* Performed conventional Polymerase Chain Reaction (PCR) and Quantitative Polymerase Chain Reaction (qPCR) for DNA amplification and analysis.
* Executed Rapid Amplified Polymorphic DNA (RAPD) for genetic diversity studies.
* Conducted bacteria culturing and isolation to study microbial growth and characteristics.
* Performed plant extraction procedures for isolating bioactive compounds.
* Cell and Tissue Culturing on various cell lines under sterile conditions.
* Responsible for data analysis, result organization, interpretation, and reporting to ensure accurate and timely dissemination of research findings.
* Authored and contributed to research writing, including the preparation of manuscripts and reports.

**GRADUATE ASSISTANT November 2016 – December 2017**

**Department of Anatomy, University of Benin, Benin, Edo State**

* Conduct Gross Anatomy practicals especially dissections for Medical, Dental and Basic Medical Science Students.
* Attend Research presentations, seminars and workshops.
* Perform animal-based in vivo experimental studies
* Assist with research projects.
* Assist with specimen management.

**PUBLICATIONS**

* Adebesin, O.A., Adesoye, A.J., Fowora, M.A., Mairiga, J.P., Oluwafemi, D.A., Onykwere, P.C., Faustina, O.U., Dagunro, E.T., **Martins, V.N.,** Ejuetuenyi, O.E., Ojo, S.G. (2023). Comparative Studies on Manual and Computational Techniques for Gel Electrophoresis Image Analysis. *International Journal of Basic Science and Technology.* **9**(3): 178-188. <https://www.dropbox.com/scl/fi/1r3geqyd7de8y3fmzfcfy/2.-Adebesin-et-al-Gel.pdf?rlkey=xyoveo8xk32nv7jjgcj30tbby&st=xbzxzqdj&dl=0>
* Adebesin, O.A., Mairiga, J.P., Utom-Obong, A., Saanu, A.I., **Martins, V.N.,** Ojo, S.G. (2023). Bioaccumulation of Heavy Metals in Crab Species from the University of Lagos. *Lapai Journal of Applied and Natural Sciences.* **8**(1): 92-102. <https://lajans.com.ng/article.php?id=190>
* Jaji-Sulaimon, R., **Martins, V.N.,** Olutunde, O.T., Bali, N.O. (2024). Characterizing Sex Using Anthropometric Variables of the Human Hip Bone in Skeletal Remains from Museum Collections in Ilorin, Kwara State, Nigeria. *Journal of Experimental and Clinical Anatomy*, **20**(2): 8-14. <https://www.ajol.info/index.php/jeca/article/view/269926>
* Jaji-Sulaimon, R., Olutunde, O.T., **Martins, V.N.,** Salako, O.A.(2024). Fingerprint Patterns indicate better Academic Performance amongst Students in North central Nigeria. *Journal of Anatomical Sciences*, **14**(2): 39-47. <https://www.asn-ng.com/journal/article/1709408753>
* Adebesin, O.A., Igwe, J.C., **Martins, V.N.,** Ejuetueyin, O.E., Adesuyi, O.O., Mokolo, N.N. (2024). Genotoxic assessment of *Oreochromis niloticus* and *Coptodon guineensis* isolated from two heavy metals contaminated rivers in Lagos State. *Nigerian Journal of Fisheries,* **21**(2): 3002-3011. <https://www.dropbox.com/scl/fi/kutoegah2mzo92he6aqag/5.-ADEBESIN-et-al-1-Fish.pdf?rlkey=scn2j5q8sfwpjlpwkwalwyijk&st=lf6ppy92&dl=0>

**Submitted Manuscript**

Oshunpidan, F.A., **Martins, V.N.**, Adebiyi, O.S., Kunle-Ajagbe, O.D., Oshunpidan, A.O., Balogun, J.A., Abiola, B.A. Case Report: A Rare Cause of Obstructive Hydrocephalus; Cerebral Aspergillosis Presenting as an Intracranial Space-Occupying Lesion in an Immunocompetent Adult. Under peer review at Surgical Neurology International.

**PRESENTATIONS (ORAL)**

* **Martins, V.N. “*Molecular basis of Bone formation*”** postgraduate seminar presentation at the department of Cell Biology and Genetics, Faculty of Science, University of Lagos **August 2023**
* **Martins, V.N. “*Anatomical basis of Progeria*”** undergraduate seminar presentation at the department of Anatomy, Faculty of Basic Medical Sciences, University of Ilorin. **March 2016**

**SKILLS**

* Writing: Literature reviewing, standard operating procedure writing, proposal and publication writing skills.
* Lab: Cell and Tissue culture, Nucleic acid extraction, Protein extraction, RAPD-PCR, PCR, Gradient PCR, RT-qPCR, Agarose Gel electrophoresis, SDS-PAGE, Microscopy, Bacteria culturing, Plant extraction.
* Presentation skills, good communication, and teaching skills.
* Data analysis, base calling, blasting, molecular docking, R, Python and some bioinformatics tools such as BioEdit, BLAST, Mega 11 and so on.

**LEADERSHIP EXPERIENCE**

* Supervised 2 undergraduate students on Diabetes research **May 2024 – August 2024**
* Led 2 Graduate Project Mates on plastic bio-degraders research **July 2023 – February 2024**
* Welfare Head, Postgraduate Seminar, University of Lagos, Akoka, Nigeria **August 2023**
* Public Relations Officer, UNIBEN Corpers’ Forum, University of Benin, Edo State, Nigeria **January 2017-September 2017**
* Logistics Subhead II Oct. 2016, National Association of Basic Medical Science Students (NABAMSS) Conference **October 2017**
* General Secretary, Basic Medical Science Student Association (BAMSSA), University of Ilorin Chapter **October 2015-July 2016**
* Vice President, Anatomical Student Society of Nigeria (ASSON), University of Ilorin Chapter **October 2014-July 2015**

**CONFERENCES**

* 6th Society for Forensic and Analytical Scientists Nigeria (SFASN) Conference **December 2024**
* 12th Annual Conference, Nigerian Academy of Neurological Surgeons (NANS) **October 2024**
  + 14th Annual Conference, Anatomical Society of Nigeria (ASN) **August 2016**
  + 13th Annual Conference, Anatomical Society of Nigeria (ASN) **November 2015**
  + 2nd National Conference, National Association of Basic Medical Science Students

(NABAMSS) **July 2016**

**CERTIFICATION**

* HELIX BIOGEN INSTITUTE: Bioinformatics Training **November 2024**
* HELIX BIOGEN INSTITUTE: Basic Genomics Technologies **November 2024**
* SYNBIO4ALL AFRICA, Engineering microbes: Summer 2024 Intermediate

Course in Synthetic Biology **July 2024**

* INASP AuthorAID, Research writing for Publication (AuthorAID National

Research Hub, Nigeria) **September 2023**

* DEPARTMENT OF PETROLEUM RESOURCES (DPR) Certified: Fire

Safety and Job Hazard Analysis/Risk Assessment **March 2018**

* NOVELLE CENTER, Certified Basic First Aid/CPR/Emergency

Response **March 2018**

* UK HSE ORGANIZATION, Certified: Health Safety and Environmental

Management Level 1, 2 & 3 **February 2018**

* UK PMP, Certified: Project Management level 1 & 2 **June 2017**

**PROFESSIONAL AFFILIATION**

* Member, Society of Experimental Biology of Nigeria (NISEB) **2024 – Present**
* Member, Anatomical society of Nigeria (ASN) **2015 – Present**

**HONOURS AND AWARDS**

Vice Chancellor’s recognition for outstanding academic performance in the Department of Cell Biology and Genetics during the 2021/2022 postgraduate academic session with a distinction

**REFEREES**

Available on Request